



SECURITIES AND EXCHANGE COMMISSION
[Release No. 34-94999; File No. SR-NYSEArca-2021-67]

Self-Regulatory Organizations; NYSE Arca, Inc.; Order Disapproving a Proposed Rule Change to List and Trade Shares of the One River Carbon Neutral Bitcoin Trust under NYSE Arca Rule 8.201-E (Commodity-Based Trust Shares)

May 27, 2022.

I. INTRODUCTION

On September 20, 2021, NYSE Arca, Inc. (“NYSE Arca” or “Exchange”) filed with the Securities and Exchange Commission (“Commission”), pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (“Exchange Act”)¹ and Rule 19b-4 thereunder,² a proposed rule change to list and trade shares (“Shares”) of the One River Carbon Neutral Bitcoin Trust (“Trust”) under NYSE Arca Rule 8.201-E (Commodity-Based Trust Shares). The proposed rule change was published for comment in the Federal Register on October 5, 2021.³

On November 10, 2021, pursuant to Section 19(b)(2) of the Exchange Act,⁴ the Commission designated a longer period within which to approve the proposed rule change, disapprove the proposed rule change, or institute proceedings to determine whether to disapprove the proposed rule change.⁵ On December 21, 2021, the Commission instituted proceedings under Section 19(b)(2)(B) of the Exchange Act⁶ to determine whether to approve or disapprove the

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

³ See Securities Exchange Act Release No. 93171 (Sept. 29, 2021), 86 FR 55073 (Oct. 5, 2021) (“Notice”). Comments on the proposed rule change can be found at: <https://www.sec.gov/comments/sr-nysearca-2021-67/srnysearca202167.htm>.

⁴ 15 U.S.C. 78s(b)(2).

⁵ See Securities Exchange Act Release No. 93553 (Nov. 10, 2021), 86 FR 64276 (Nov. 17, 2021).

⁶ 15 U.S.C. 78s(b)(2)(B).

proposed rule change.⁷ On March 18, 2022, the Commission designated a longer period for Commission action on the proposed rule change.⁸

This order disapproves the proposed rule change. The Commission concludes that NYSE Arca has not met its burden under the Exchange Act and the Commission’s Rules of Practice to demonstrate that its proposal is consistent with the requirements of Exchange Act Section 6(b)(5), and in particular, the requirement that the rules of a national securities exchange be “designed to prevent fraudulent and manipulative acts and practices” and “to protect investors and the public interest.”⁹

When considering whether NYSE Arca’s proposal to list and trade the Shares is designed to prevent fraudulent and manipulative acts and practices, the Commission applies the same standard used in its orders considering previous proposals to list bitcoin¹⁰-based commodity trusts and bitcoin-based trust issued receipts.¹¹ As the Commission has explained, an exchange

⁷ See Securities Exchange Act Release No. 93840 (Dec. 21, 2021), 86 FR 73826 (Dec. 28, 2021).

⁸ See Securities Exchange Act Release No. 94475 (Mar. 18, 2022), 87 FR 16808 (Mar. 24, 2022).

⁹ 15 U.S.C. 78f(b)(5).

¹⁰ Bitcoins are digital assets that are issued and transferred via a decentralized, open-source protocol used by a peer-to-peer computer network through which transactions are recorded on a public transaction ledger known as the “bitcoin blockchain.” The bitcoin protocol governs the creation of new bitcoins and the cryptographic system that secures and verifies bitcoin transactions. See, e.g., Notice, 86 FR at 55075.

¹¹ See Order Setting Aside Action by Delegated Authority and Disapproving a Proposed Rule Change, as Modified by Amendments No. 1 and 2, To List and Trade Shares of the Winklevoss Bitcoin Trust, Securities Exchange Act Release No. 83723 (July 26, 2018), 83 FR 37579 (Aug. 1, 2018) (SR-BatsBZX-2016-30) (“Winklevoss Order”); Order Disapproving a Proposed Rule Change, as Modified by Amendment No. 1, To Amend NYSE Arca Rule 8.201-E (Commodity-Based Trust Shares) and To List and Trade Shares of the United States Bitcoin and Treasury Investment Trust Under NYSE Arca Rule 8.201-E, Securities Exchange Act Release No. 88284 (Feb. 26, 2020), 85 FR 12595 (Mar. 3, 2020) (SR-NYSEArca-2019-39) (“USBT Order”); Order Disapproving a Proposed Rule Change To List and Trade Shares of the WisdomTree Bitcoin Trust Under BZX Rule 14.11(e)(4), Commodity-Based Trust Shares, Securities Exchange Act Release No. 93700 (Dec. 1, 2021), 86 FR 69322 (Dec. 7, 2021) (SR-CboeBZX-2021-024) (“WisdomTree Order”); Order Disapproving a Proposed Rule Change To List and Trade Shares of the Valkyrie Bitcoin Fund under NYSE Arca Rule 8.201-E (Commodity-Based

that lists bitcoin-based exchange-traded products (“ETPs”) can meet its obligations under

Trust Shares), Securities Exchange Act Release No. 93859 (Dec. 22, 2021), 86 FR 74156 (Dec. 29, 2021) (SR-NYSEArca-2021-31) (“Valkyrie Order”); Order Disapproving a Proposed Rule Change To List and Trade Shares of the Kryptoin Bitcoin ETF Trust under BZX Rule 14.11(e)(4), Commodity-Based Trust Shares, Securities Exchange Act Release No. 93860 (Dec. 22, 2021), 86 FR 74166 (Dec. 29, 2021) (SR-CboeBZX-2021-029) (“Kryptoin Order”); Order Disapproving a Proposed Rule Change To List and Trade Shares of the First Trust SkyBridge Bitcoin ETF Trust under NYSE Arca Rule 8.201-E (Commodity-Based Trust Shares), Securities Exchange Act Release No. 94006 (Jan. 20, 2022), 87 FR 3869 (Jan. 25, 2022) (SR-NYSEArca-2021-37) (“SkyBridge Order”); Order Disapproving a Proposed Rule Change To List and Trade Shares of the Wise Origin Bitcoin Trust under BZX Rule 14.11(e)(4), Commodity-Based Trust Shares, Securities Exchange Act Release No. 94080 (Jan. 27, 2022), 87 FR 5527 (Feb. 1, 2022) (SR-CboeBZX-2021-039) (“Wise Origin Order”); Order Disapproving a Proposed Rule Change To List and Trade Shares of the NYDIG Bitcoin ETF Under NYSE Arca Rule 8.201-E (Commodity-Based Trust Shares), Securities Exchange Act Release No. 94395 (Mar. 10, 2022), 87 FR 14932 (Mar. 16, 2022) (SR-NYSEArca-2021-57) (“NYDIG Order”); Order Disapproving a Proposed Rule Change To List and Trade Shares of the Global X Bitcoin Trust Under BZX Rule 14.11(e)(4), Commodity-Based Trust Shares, Securities Exchange Act Release No. 94396 (Mar. 10, 2022), 87 FR 14912 (Mar. 16, 2022) (SR-CboeBZX-2021-052) (“Global X Order”); and Order Disapproving a Proposed Rule Change, as Modified by Amendment No. 1, To List and Trade Shares of the ARK 21Shares Bitcoin ETF under BZX Rule 14.11(e)(4), Commodity-Based Trust Shares, Securities Exchange Act Release No. 94571 (Mar. 31, 2022), 87 FR 20014 (Apr. 6, 2022) (SR-CboeBZX-2021-052) (“ARK 21Shares Order”). See also Order Disapproving a Proposed Rule Change, as Modified by Amendment No. 1, Relating to the Listing and Trading of Shares of the SolidX Bitcoin Trust Under NYSE Arca Equities Rule 8.201, Securities Exchange Act Release No. 80319 (Mar. 28, 2017), 82 FR 16247 (Apr. 3, 2017) (SR-NYSEArca-2016-101) (“SolidX Order”). The Commission also notes that orders were issued by delegated authority on the following matters: Order Disapproving a Proposed Rule Change To List and Trade the Shares of the ProShares Bitcoin ETF and the ProShares Short Bitcoin ETF, Securities Exchange Act Release No. 83904 (Aug. 22, 2018), 83 FR 43934 (Aug. 28, 2018) (SR-NYSEArca-2017-139) (“ProShares Order”); Order Disapproving a Proposed Rule Change To List and Trade the Shares of the GraniteShares Bitcoin ETF and the GraniteShares Short Bitcoin ETF, Securities Exchange Act Release No. 83913 (Aug. 22, 2018), 83 FR 43923 (Aug. 28, 2018) (SR-CboeBZX-2018-001) (“GraniteShares Order”); Order Disapproving a Proposed Rule Change To List and Trade Shares of the VanEck Bitcoin Trust Under BZX Rule 14.11(e)(4), Commodity-Based Trust Shares, Securities Exchange Act Release No. 93559 (Nov. 12, 2021), 86 FR 64539 (Nov. 18, 2021) (SR-CboeBZX-2021-019) (“VanEck Order”); Order Granting Approval of a Proposed Rule Change, as Modified by Amendment No. 2, To List and Trade Shares of the Teucrium Bitcoin Futures Fund Under NYSE Arca Rule 8.200-E, Commentary .02 (Trust Issued Receipts), Securities Exchange Act Release No. 94620 (Apr. 6, 2022), 87 FR 21676 (Apr. 12, 2022) (SR-NYSEArca-2021-53) (“Teucrium Order”); and Order Granting Approval of a Proposed Rule Change, as Modified by Amendment No. 2, To List and Trade Shares of the Valkyrie XBTO Bitcoin Futures Fund Under Nasdaq Rule 5711(g) (Commodity Futures Trust Shares), Securities Exchange Act Release No. 94853 (May 5, 2022), 87 FR 28848 (May 11, 2022) (SR-NASDAQ-2021-066) (“Valkyrie XBTO Order”).

Exchange Act Section 6(b)(5) by demonstrating that the exchange has a comprehensive surveillance-sharing agreement with a regulated market of significant size related to the underlying or reference bitcoin assets.¹²

The standard requires such surveillance-sharing agreements since they “provide a necessary deterrent to manipulation because they facilitate the availability of information needed to fully investigate a manipulation if it were to occur.”¹³ The Commission has emphasized that it is essential for an exchange listing a derivative securities product to enter into a surveillance-sharing agreement with markets trading the underlying assets for the listing exchange to have the ability to obtain information necessary to detect, investigate, and deter fraud and market manipulation, as well as violations of exchange rules and applicable federal securities laws and rules.¹⁴ The hallmarks of a surveillance-sharing agreement are that the agreement provides for the sharing of information about market trading activity, clearing activity, and customer identity; that the parties to the agreement have reasonable ability to obtain access to and produce requested information; and that no existing rules, laws, or practices would impede one party to the agreement from obtaining this information from, or producing it to, the other party.¹⁵

In the context of this standard, the terms “significant market” and “market of significant size” include a market (or group of markets) as to which (a) there is a reasonable likelihood that

¹² See USBT Order, 85 FR at 12596. See also Winklevoss Order, 83 FR at 37592 n.202 and accompanying text (discussing previous Commission approvals of commodity-trust ETPs); GraniteShares Order, 83 FR at 43925-27 nn.35-39 and accompanying text (discussing previous Commission approvals of commodity-futures ETPs).

¹³ See Amendment to Rule Filing Requirements for Self-Regulatory Organizations Regarding New Derivative Securities Products, Securities Exchange Act Release No. 40761 (Dec. 8, 1998), 63 FR 70952, 70959 (Dec. 22, 1998) (“NDSP Adopting Release”). See also Winklevoss Order, 83 FR at 37594; ProShares Order, 83 FR at 43936; GraniteShares Order, 83 FR at 43924; USBT Order, 85 FR at 12596.

¹⁴ See NDSP Adopting Release, 63 FR at 70959.

¹⁵ See Winklevoss Order, 83 FR at 37592-93; Letter from Brandon Becker, Director, Division of Market Regulation, Commission, to Gerard D. O’Connell, Chairman, Intermarket Surveillance Group (June 3, 1994), available at <https://www.sec.gov/divisions/marketreg/mr-noaction/isg060394.htm>.

a person attempting to manipulate the ETP would also have to trade on that market to successfully manipulate the ETP, so that a surveillance-sharing agreement would assist in detecting and deterring misconduct, and (b) it is unlikely that trading in the ETP would be the predominant influence on prices in that market.¹⁶ A surveillance-sharing agreement must be entered into with a “significant market” to assist in detecting and deterring manipulation of the ETP, because a person attempting to manipulate the ETP is reasonably likely to also engage in trading activity on that “significant market.”¹⁷

Consistent with this standard, for the commodity-trust ETPs approved to date for listing and trading, there has been in every case at least one significant, regulated market for trading futures on the underlying commodity—whether gold, silver, platinum, palladium, or copper—and the ETP listing exchange has entered into surveillance-sharing agreements with, or held Intermarket Surveillance Group (“ISG”) membership in common with, that market.¹⁸ Moreover, the surveillance-sharing agreements have been consistently present whenever the Commission has approved the listing and trading of derivative securities, even where the underlying securities were also listed on national securities exchanges—such as options based on an index of stocks traded on a national securities exchange—and were thus subject to the Commission’s direct regulatory authority.¹⁹

¹⁶ See Winklevoss Order, 83 FR at 37594. This definition is illustrative and not exclusive. There could be other types of “significant markets” and “markets of significant size,” but this definition is an example that will provide guidance to market participants. See *id.*

¹⁷ See USBT Order, 85 FR at 12597.

¹⁸ See Winklevoss Order, 83 FR at 37594.

¹⁹ See USBT Order, 85 FR at 12597; Securities Exchange Act Release No. 33555 (Jan. 31, 1994), 59 FR 5619, 5621 (Feb. 7, 1994) (SR-Amex-93-28) (order approving listing of options on American Depositary Receipts (“ADRs”)). The Commission has also required a surveillance-sharing agreement in the context of index options even when (i) all of the underlying index component stocks were either registered with the Commission or exempt from registration under the Exchange Act; (ii) all of the underlying index component stocks traded in the U.S. either directly or as ADRs on a national securities exchange; and (iii) effective international ADR arbitrage alleviated concerns over the relatively smaller ADR trading volume, helped to ensure that ADR prices reflected the

Listing exchanges have also attempted to demonstrate that other means besides surveillance-sharing agreements will be sufficient to prevent fraudulent and manipulative acts and practices, including that the bitcoin market as a whole or the relevant underlying bitcoin market is “uniquely” and “inherently” resistant to fraud and manipulation.²⁰ In response, the Commission has agreed that, if a listing exchange could establish that the underlying market inherently possesses a unique resistance to manipulation beyond the protections that are utilized by traditional commodity or securities markets, it would not necessarily need to enter into a surveillance-sharing agreement with a regulated significant market.²¹ Such resistance to fraud and manipulation, however, must be novel and beyond those protections that exist in traditional commodity markets or equity markets for which the Commission has long required surveillance-sharing agreements in the context of listing derivative securities products.²²

As discussed in more detail below, NYSE Arca does not assert that the Exchange has a comprehensive surveillance-sharing agreement with a regulated market of significant size.²³ Rather, NYSE Arca contends that the proposal is consistent with Section 6(b)(5) of the Exchange

pricing on the home market, and helped to ensure more reliable price determinations for settlement purposes, due to the unique composition of the index and reliance on ADR prices. See Securities Exchange Act Release No. 26653 (Mar. 21, 1989), 54 FR 12705, 12708 (Mar. 28, 1989) (SR-Amex-87-25) (stating that “surveillance-sharing agreements between the exchange on which the index option trades and the markets that trade the underlying securities are necessary” and that “[t]he exchange of surveillance data by the exchange trading a stock index option and the markets for the securities comprising the index is important to the detection and deterrence of intermarket manipulation.”). And the Commission has required a surveillance-sharing agreement even when approving options based on an index of stocks traded on a national securities exchange. See Securities Exchange Act Release No. 30830 (June 18, 1992), 57 FR 28221, 28224 (June 24, 1992) (SR-Amex-91-22) (stating that surveillance-sharing agreements “ensure the availability of information necessary to detect and deter potential manipulations and other trading abuses”).

²⁰ See USBT Order, 85 FR at 12597.

²¹ See Winklevoss Order, 83 FR at 37580, 37582-91 (addressing assertions that “bitcoin and bitcoin [spot] markets” generally, as well as one bitcoin trading platform specifically, have unique resistance to fraud and manipulation); see also USBT Order, 85 FR at 12597.

²² See USBT Order, 85 FR at 12597.

²³ See *infra* Section III.B.2.

Act because the design of the methodology and framework of the Index (as defined herein) is sufficiently resistant to market manipulation.²⁴ In addition, NYSE Arca states that the “significant liquidity in the spot market and resultant minimal impact of market orders on the overall price of bitcoin, in conjunction with the Trust’s offering only in-kind creation and redemption of Shares with respect to [a]uthorized [p]articipants, further mitigates the risk associated with potential manipulation and financially disincentivizes manipulation of the Index.”²⁵

In the analysis that follows, the Commission examines whether the proposed rule change is consistent with Section 6(b)(5) of the Exchange Act by addressing: in Section III.B.1 assertions that other means besides surveillance-sharing agreements will be sufficient to prevent fraudulent and manipulative acts and practices; and in Section III.B.2 assertions relating to NYSE Arca’s surveillance-sharing agreements related to bitcoin.

Based on the analysis, the Commission concludes that NYSE Arca has not established that other means to prevent fraudulent and manipulative acts and practices are sufficient to justify dispensing with the requisite surveillance-sharing agreement. And as mentioned above, NYSE Arca does not assert that it has a comprehensive surveillance-sharing agreement with a regulated market of significant size related to bitcoin. Moreover, as discussed further below, NYSE Arca repeats various assertions made in prior bitcoin-based ETP proposals that the Commission has previously addressed and rejected—and more importantly, NYSE Arca does not respond to the Commission’s reasons for rejecting those assertions but merely repeats them. As a result, the Commission is unable to find that the proposed rule change is consistent with the statutory requirements of Exchange Act Section 6(b)(5).

The Commission emphasizes that its disapproval of this proposed rule change does not rest on an evaluation of whether bitcoin, or blockchain technology more generally, has utility or

²⁴ See Notice, 86 FR at 55080.

²⁵ Id. at 55082.

value as an innovation or an investment. Rather, the Commission is disapproving this proposed rule change because, as discussed below, NYSE Arca has not met its burden to demonstrate that its proposal is consistent with the requirements of Exchange Act Section 6(b)(5).

II. DESCRIPTION OF THE PROPOSED RULE CHANGE

As described in more detail in the Notice,²⁶ the Exchange proposes to list and trade the Shares of the Trust under NYSE Arca Rule 8.201-E, which governs the listing and trading of Commodity-Based Trust Shares on the Exchange.

The investment objective of the Trust is to track the performance of bitcoin, as measured by the performance of the MVIS One River Carbon Neutral Bitcoin Index (“Index”), adjusted for the Trust’s expenses and other liabilities.²⁷ As discussed below, the Index is designed to reflect the performance of bitcoin in U.S. dollars on a carbon neutral basis. In seeking to achieve its investment objective, the Trust would hold bitcoin and would value its Shares based on the same methodology used to calculate the Index, as adjusted to reflect the expenses associated with offsetting carbon credits.²⁸ The Trust would not purchase or sell bitcoin directly, although the Trust may direct the Custodian to sell or transfer bitcoin to pay certain expenses.²⁹ The Trust

²⁶ See Notice, supra note 3. See also Amendment No. 1 to the Registration Statement on Form S-1, dated October 6, 2021, filed by the Trust with the Commission under the Securities Act of 1933 (File No. 333-256407) (“Registration Statement”).

²⁷ See Notice, 86 FR at 55073. The sponsor of the Trust is One River Digital Asset Management, LLC (“Sponsor”), a Delaware limited liability company and a wholly-owned subsidiary of One River Asset Management, LLC. The trustee for the Trust is Delaware Trust Company. The marketing agent for the Trust is Foreside Global Services, LLC. The Bank of New York Mellon (“BNY Mellon”) would act as the Trust’s administrator and transfer agent. The custodian for the Trust, Coinbase Custody Trust Company, LLC (“Custodian”), would hold all of the Trust’s bitcoin on the Trust’s behalf and retain custody of the Trust’s bitcoin in an account for the Trust (“Bitcoin Account”). See id.

²⁸ See id. at 55074. According to the Sponsor, “[t]he Trust intends to offset the carbon footprint associated with the bitcoin it holds by paying for the retirement of voluntary carbon credits equal to the daily estimated carbon emissions associated with the bitcoins held by the Trust.” See Registration Statement at 47. See also infra notes 39-41 and accompanying text (further describing “carbon credits”).

²⁹ See Notice, 86 FR at 55074.

would not hold cash or cash equivalents; however, there may be situations where the Trust would hold cash on a temporary basis.³⁰ The Trust would not hold futures, options, or options on futures.³¹

The Index value would be the benchmark value of the bitcoin, less the estimated daily cost of offsetting the carbon emissions³² of a single bitcoin.³³ The Index is the aggregation of executed trade data for “major” bitcoin spot platforms.³⁴ According to NYSE Arca, to be eligible for inclusion in the Index, a constituent bitcoin platform must enforce policies to ensure fair and transparent market conditions and have processes in place to impede illegal or manipulative trading practices. Additionally, each constituent bitcoin platform must comply with applicable law and regulation, including proper anti-money laundering (“AML”) and know-your-customer (“KYC”) procedures.³⁵ More than 160 global spot platforms are evaluated monthly based on data transparency, KYC stringency, and transaction monitoring.³⁶ The Index is constructed using

³⁰ See id. The Trust has entered into a cash custody agreement with BNY Mellon under which BNY Mellon would act as custodian of the Trust’s cash and cash equivalents. See id.

³¹ See id.

³² See infra note 44 and accompanying text (generally describing the connection between electricity usage and consumption with, and the carbon emission intensity of such electricity consumption relating to, the bitcoin mining network). See also Registration Statement at 3.

³³ See Notice, 86 FR at 55075. The Index methodology was developed by MV Index Solutions GmbH (“MVIS”) and is monitored by the One River Index Committee (“Committee”), an independent, third-party calculation agent for the Index. MVIS, with the assistance of its affiliates, is also the calculation agent for the Index and for the MVIS® CryptoCompare Bitcoin Benchmark Rate (“BBR”), which measures the value of the underlying bitcoin represented by, and is the bitcoin benchmark component for, the Index. The current constituent bitcoin platforms of the BBR are Coinbase, Gemini, Bitstamp, Kraken, and itBit. See id. at 55074-75.

³⁴ See id. at 55075. See also Sponsor Letter at 6-7 (describing how the Index is transparent and rules-based).

³⁵ See Notice, 86 FR at 55075.

³⁶ See id.

bitcoin price feeds from eligible bitcoin spot markets³⁷ and volume weighted median price averages, calculated over 20 intervals in rolling three-minute increments, less the estimated cost of offsetting the daily carbon emissions attributable to each bitcoin in the network.³⁸

The Trust intends to offset the carbon footprint associated with bitcoin once a quarter by paying for the instantaneous retirement of voluntary carbon credits equal to the daily estimated carbon emissions associated with the bitcoins held by the Trust.³⁹ The Trust has entered into an agreement with LIRDES S.A., d/b/a Moss Earth (“Moss”), a company located in Uruguay, to pay for carbon credit tokens created by Moss (“MCO2 Tokens”) representing certified reductions in greenhouse gas emissions.⁴⁰ The MCO2 Tokens issued by Moss are carbon offsets encrypted and tokenized, utilizing blockchain technology, and are stored on a registry managed by Verra.⁴¹ The Trust would purchase MCO2 Tokens from Moss at the end of March, June, September, and December at pre-negotiated prices, and Moss would instantaneously retire the tokens to the Ethereum blockchain.⁴² The number of MCO2 Tokens paid for by the Trust would equal the

³⁷ The Committee selects the Index’s eligible spot markets and evaluates them semi-annually, with the final selections to be made on the third Friday of January and July or during market disruptions where a market review is warranted, as determined by the Committee. See id.

³⁸ See id. at 55074.

³⁹ See id. According to the Exchange, voluntary carbon credits are certified and standardized under the Verra Verified Carbon Standard (“Verra”), an organization that establishes and manages standards and programs in connection with voluntary carbon credits, and the Trust would only utilize carbon credits that meet the Verra standards. See id. at 55074-75.

⁴⁰ See id. at 55075. Upon expiration of its agreement with Moss in April 2031, the Trust would either enter into a replacement agreement or pay for the retirement of MCO2 Tokens or similar carbon credits at then-current spot prices for such instruments. See id.

⁴¹ See id. According to the Exchange, the MCO2 Token is a digital representation of a carbon credit that is stored on a registry by Verra and can be acquired in over-the-counter (“OTC”) or publicly-traded markets. Moss purchases carbon credits from projects that are certified under Verra’s Verified Carbon Standard. Each circulating MCO2 Token is intended to represent a claim on a certified carbon credit held in an aggregated pool of carbon credits within the Moss account on the Verra registry. Tokenized carbon credits are fungible and do not represent a claim on a specific underlying carbon credit issued to a specific carbon reduction project. See id.

⁴² See id. at 55075 & n.10.

aggregated sum of offsets implied by the daily carbon emissions for a single bitcoin over the preceding quarter, multiplied by the average number of bitcoins held in the Trust's portfolio during the quarter, with a view towards tracking the carbon footprint offset estimate calculated by the Index.⁴³ The Trust would not hold the carbon offset MCO2 Tokens as an asset. Instead, the Trust would pay for the MCO2 Tokens and retire the tokens to the Ethereum blockchain to reduce global carbon emissions by the carbon dioxide tonnage (or tonnage of other similar greenhouse gases) corresponding to such tokens.⁴⁴

BNY Mellon would calculate the net asset value ("NAV") of the Trust once each Exchange trading day. The NAV for a normal trading day would be released after 4:00 p.m. E.T. (often by 5:30 p.m. E.T. and almost always by 8:00 p.m. E.T.).⁴⁵ The NAV per Share of the Trust would be equal to the median price of the bitcoin used in the calculation of the Index, less the Trust's liabilities, including the cost of carbon measured in the Index, divided by the total number of outstanding Shares. The accumulation of the daily carbon offset costs calculated in the Index would act as an expense to the Trust. The payment for the retirement of carbon offsets by the Trust would occur once per quarter of the calendar year, and the number of MCO2 Tokens retired would equal the aggregated sum of offsets implied by the daily carbon footprint for each

⁴³ See id. at 55075.

⁴⁴ See id. at 55075 & n.10. According to the Exchange, the cost of the carbon offset used in the Index is calculated in the following steps. First, electricity consumption for the bitcoin mining network is recorded daily. Second, geolocation of bitcoin miners identifies the location of electricity usage. Third, for each location, the average production of electricity by its source of production (e.g., solar, coal) is recorded. This estimates the carbon emission intensity of electricity consumption in the bitcoin network. Fourth, total electricity consumption is multiplied by the carbon intensity of the bitcoin network to estimate total carbon emissions. These steps allow MVIS to obtain a daily estimate of the carbon emissions necessary to run the bitcoin network. The total carbon emissions of the bitcoin network are divided by the total number of bitcoins in circulation to estimate the carbon emissions attributable to each bitcoin on each day. Finally, the carbon emission attributable to each bitcoin is multiplied by the MCO2 Token market price of a carbon offset. See id. at 55074. The daily accumulation of the carbon offset component of the Index measures the totality of the cost of the carbon offset required for holding a single bitcoin over the accumulation period. See id. at 55075.

⁴⁵ See id. at 55076-77.

bitcoin held by the Trust during the quarter. The NAV would accrue the estimated carbon cost daily.⁴⁶

The Trust would provide website disclosure of its bitcoin holdings daily.⁴⁷ The Intraday Indicative Value (“IIV”) per Share would be widely disseminated every 15 seconds during the NYSE Arca Core Trading Session (normally 9:30 a.m. E.T. to 4:00 p.m. E.T.) by the Trust and by one or more major market data vendors and would be available through on-line information services. The IIV would be calculated by using the prior day’s closing NAV per Share of the Trust as a base and updating that value throughout the trading day to reflect changes in the most recently reported price level of the Index as reported by Bloomberg, L.P. or another reporting service.⁴⁸

The Trust would process all creations and redemptions in-kind and only in one or more blocks of 50,000 Shares (“Baskets”).⁴⁹ When creating Shares, authorized participants would deliver, or facilitate the delivery of, bitcoin to the Bitcoin Account in exchange for Shares, and when redeeming Shares, the Trust, through the Custodian, would deliver bitcoin to authorized participants.

Although the Trust would create Baskets only upon the receipt of bitcoins, and redeem Baskets only by distributing bitcoins, a separate cash exchange process would be made available to authorized participants. Under the cash exchange process, an authorized participant would be able to deposit cash with BNY Mellon, which would facilitate the purchase or sale of bitcoins through a liquidity provider (“Liquidity Provider”) on behalf of an authorized participant. The bitcoin purchased (or sold) by the Liquidity Provider in connection with the cash exchange

⁴⁶ See id. at 55076.

⁴⁷ See id. at 55082.

⁴⁸ See id. at 55077.

⁴⁹ See id. at 55074, 55077.

process would, in turn, be delivered to (or from, as appropriate) the Custodian, on behalf of the Trust, in exchange for Baskets.⁵⁰

III. DISCUSSION

A. The Applicable Standard for Review

The Commission must consider whether NYSE Arca's proposal is consistent with the Exchange Act. Section 6(b)(5) of the Exchange Act requires, in relevant part, that the rules of a national securities exchange be designed "to prevent fraudulent and manipulative acts and practices" and "to protect investors and the public interest."⁵¹ Under the Commission's Rules of Practice, the "burden to demonstrate that a proposed rule change is consistent with the Exchange Act and the rules and regulations issued thereunder . . . is on the self-regulatory organization ['SRO'] that proposed the rule change."⁵²

The description of a proposed rule change, its purpose and operation, its effect, and a legal analysis of its consistency with applicable requirements must all be sufficiently detailed and specific to support an affirmative Commission finding,⁵³ and any failure of an SRO to provide this information may result in the Commission not having a sufficient basis to make an affirmative finding that a proposed rule change is consistent with the Exchange Act and the

⁵⁰ See id. at 55074.

⁵¹ 15 U.S.C. 78f(b)(5). Pursuant to Section 19(b)(2) of the Exchange Act, 15 U.S.C. 78s(b)(2), the Commission must disapprove a proposed rule change filed by a national securities exchange if it does not find that the proposed rule change is consistent with the applicable requirements of the Exchange Act. Exchange Act Section 6(b)(5) states that an exchange shall not be registered as a national securities exchange unless the Commission determines that "[t]he rules of the exchange are designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to foster cooperation and coordination with persons engaged in regulating, clearing, settling, processing information with respect to, and facilitating transactions in securities, to remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general, to protect investors and the public interest; and are not designed to permit unfair discrimination between customers, issuers, brokers, or dealers, or to regulate by virtue of any authority conferred by this title matters not related to the purposes of this title or the administration of the exchange." 15 U.S.C. 78f(b)(5).

⁵² Rule 700(b)(3), Commission Rules of Practice, 17 CFR 201.700(b)(3).

⁵³ See id.

applicable rules and regulations.⁵⁴ Moreover, “unquestioning reliance” on an SRO’s representations in a proposed rule change is not sufficient to justify Commission approval of a proposed rule change.⁵⁵

B. Whether NYSE Arca Has Met Its Burden to Demonstrate That the Proposal Is Designed to Prevent Fraudulent and Manipulative Acts and Practices

1. Assertions That Other Means Besides Surveillance-Sharing Agreements Will Be Sufficient to Prevent Fraudulent and Manipulative Acts and Practices

As stated above, the Commission has recognized that a listing exchange could demonstrate that other means to prevent fraudulent and manipulative acts and practices are sufficient to justify dispensing with a comprehensive surveillance-sharing agreement with a regulated market of significant size, including by demonstrating that the bitcoin market as a whole or the relevant underlying bitcoin market is uniquely and inherently resistant to fraud and manipulation.⁵⁶ Such resistance to fraud and manipulation must be novel and beyond those protections that exist in traditional commodities or securities markets.⁵⁷

(a) Assertions Regarding Bitcoin and Bitcoin Markets

NYSE Arca does not assert that the bitcoin market as a whole or the relevant underlying bitcoin market is uniquely and inherently resistant to fraud and manipulation. The Exchange, however, does assert that the “significant liquidity in the spot market and resultant minimal impact of market orders on the overall price of bitcoin, in conjunction with the Trust’s offering

⁵⁴ See id.

⁵⁵ Susquehanna Int’l Group, LLP v. Securities and Exchange Commission, 866 F.3d 442, 447 (D.C. Cir. 2017) (“Susquehanna”).

⁵⁶ See USBT Order, 85 FR at 12597 n.23. The Commission is not applying a “cannot be manipulated” standard. Instead, the Commission is examining whether the proposal meets the requirements of the Exchange Act and, pursuant to its Rules of Practice, places the burden on the listing exchange to demonstrate the validity of its contentions and to establish that the requirements of the Exchange Act have been met. See id.

⁵⁷ See id. at 12597.

only in-kind creation and redemption of Shares . . . mitigates the risk associated with potential manipulation and financially disincentivizes manipulation of the Index.”⁵⁸

In support of the proposal, the Exchange states that “bitcoin is dominant, accounting for more than 49% of the total market capitalization of cryptoassets” and that, “[a]s of June 2021, the market cap for [b]itcoin is over \$600 billion.”⁵⁹ In addition, NYSE Arca states that bitcoin has the “longest history of any cryptoasset” and ranks as one of the most widely used, if not the most widely used, cryptoassets in the global token market, with “more than 38 million unique bitcoin wallet addresses holding a positive balance, which shows a steady increase in the number of bitcoin owners and depth of ownership over the last four years.”⁶⁰ Moreover, the Exchange provides that bitcoin investors hold bitcoin for a relatively long time, as “58% of owners maintain ownership for longer than a one-year period, and 70% of all holders are in profitable positions.”⁶¹

NYSE Arca also states that the bitcoin marketplace is maturing. The Exchange cites to increased institutional participation, noting that public and established companies now hold bitcoin, and that other financial market participants (e.g., insurance companies and pension funds) appear to be “embracing cryptoassets.”⁶² The Exchange also provides that “the rise in the digital economy has led to an increase in activity within the regulated banking system, reflecting

⁵⁸ See Notice, 86 FR at 55082.

⁵⁹ See Notice, 86 FR at 55078. See also letter from Sponsor (Jan. 16, 2022) (“Sponsor Letter”) at 1 (stating that the expansion of bitcoin market capitalization to nearly one trillion dollars and average daily turnover of \$18.7 billion is above many well-known single name equity trading volumes such as Apple Inc.).

⁶⁰ See Notice, 86 FR at 55078.

⁶¹ See *id.*

⁶² See *id.* Specifically, NYSE Arca states that “[e]stablished companies like Tesla, Inc., MicroStrategy Incorporated, and Square, Inc., among others, have recently announced substantial investments in bitcoin in amounts as large as \$1.5 billion (Tesla) and \$425 million (MicroStrategy)” and that “MassMutual Insurance Company, one of the nation’s oldest private companies and a historically conservative investor, has purchased over \$100 million in bitcoin.” *Id.*

increased institutional demand.”⁶³ Moreover, according to the Exchange, “licensed and regulated service providers have emerged to provide fund custodial services for digital assets, among other services.”⁶⁴

Additionally, NYSE Arca states that the Commodity Futures Trading Commission (“CFTC”) has “exercised its regulatory jurisdiction in bringing a number of enforcement actions related to bitcoin and against trading platforms that offer cryptoasset trading, including, in certain cases, against defendants for direct trading of cryptoassets.”⁶⁵ Specifically, NYSE Arca contends that the CFTC “has historically asserted jurisdiction over spot market commodities trading, where manipulative trading in the spot market can affect its derivatives market.”⁶⁶

Finally, according to NYSE Arca, certain other regulatory bodies, such as the U.S. Department of the Treasury’s Financial Crimes Enforcement Network (“FinCEN”), the U.S. Office of the Comptroller of the Currency (“OCC”), and the Board of Governors of the Federal

⁶³ Id. See also letter from Paul Grewal, Chief Legal Officer, Coinbase (Jan. 11, 2022) (“Coinbase Letter”) at 3-4 (restating NYSE Arca’s assertions and generally observing “growth in the use of crypto assets to participate in decentralized finance, or DeFi, applications such as peer-to-peer borrowing and lending, with the total value allocated towards decentralized finance globally growing from under \$1 billion to over \$15 billion from December 31, 2019 to December 31, 2020,” and “a positive trend in the total market capitalization of crypto assets which indicates increased adoption”); Sponsor Letter at 1-2 (generally asserting that the rising value of bitcoin has accompanied advancement in information around its operational quality and the development of novel techniques designed to increase transparency and negate the risk of manipulation).

⁶⁴ See Notice, 86 FR at 55078.

⁶⁵ See id. at 55079.

⁶⁶ See id. at 55079-80. The Exchange specifically cites to two cases, CFTC v. Gelfman Blueprint (No. 17-7181) (S.D.N.Y. Sept. 21, 2017) and CFTC v. Patrick K. McDonnell & Cabbagetechn Corp., d/b/a Coin Drop Markets, (No. 18-CV-0361) (E.D.N.Y. Aug. 24, 2018), where, according to the Exchange, the CFTC asserted jurisdiction over the spot market when “there was little to no derivatives trading in the United States” or the “case did not indicate that there was any derivatives trading conducted,” respectively. See id. NYSE Arca surmises that the “[c]ourts have taken an expansive interpretation of the CFTC’s jurisdiction over trading in particular virtual currency products on the basis that futures trading in such products as a class already occurs.” See id. See also Coinbase Letter at 5 (asserting that the Commission should rely on the CFTC to exercise its traditional fraud authority to ensure the underlying bitcoin market is free of manipulation, and that these safeguards should satisfy the Commission).

Reserve System (“Federal Reserve”) have recently proposed or clarified rules to enhance transparency,⁶⁷ custody,⁶⁸ and account services⁶⁹ relating to “cryptoassets” or “digital assets,” respectively.⁷⁰

As with the previous proposals, the Commission here concludes that the Exchange’s assertions about the general liquidity, growth, and acceptance of the bitcoin market do not constitute other means to prevent fraud and manipulation sufficient to justify dispensing with the requisite surveillance-sharing agreement. While the Exchange states that the significant liquidity in the spot market and resultant minimal impact of market orders on the overall price of bitcoin mitigates the risk associated with potential manipulation, such assertion is general and conclusory. Indeed, apart from the market capitalization of bitcoin and the number of unique

⁶⁷ See Notice, 86 FR at 55078-79. NYSE Arca states that FinCEN has proposed rulemaking initiatives aimed at enhancing transparency, which would require certain financial institutions to collect, retain, share, and report to FinCEN information related to certain transactions involving convertible virtual currency or certain digital assets, including identification information of persons engaged in such transactions. See *id.* According to NYSE Arca, such proposed rules “are intended to reduce anonymity and promote transparency within the cryptoasset markets generally and of cryptoasset exchanges specifically, including the exchanges that compose the bitcoin component of the Index.” *Id.* NYSE Arca also provides that, in March 2021, the Financial Action Task Force (“FATF”) issued updated draft guidance that, “when issued in final form, would significantly broaden the reach of certain anti-money laundering, including know-your-customer, compliance requirements applicable to transactions in virtual assets or involving virtual asset service providers.” *Id.* While NYSE Arca acknowledges that “FinCEN has not finalized its proposed rules yet, and the FATF guidance does not have the force of law,” NYSE Arca argues that “these actions signal a concerted effort among regulatory bodies to introduce requirements that would reduce anonymity of cryptoasset transactions and implement stronger anti-money laundering compliance measures among industry participants.” *Id.*

⁶⁸ See Notice, 86 FR at 55080. According to the Exchange, “the [OCC] has made clear that federally-chartered banks are able to provide custody services for cryptoassets and other digital assets.” *Id.*

⁶⁹ See *id.* According to the Exchange, “the [Federal Reserve] proposed guidelines to evaluate the requests for account services at Federal Reserve Banks in light of recent changes to the financial payments landscape.” *Id.*

⁷⁰ The Exchange also mentions technological advancements in the bitcoin protocol, as well as advancements in regulatory frameworks, both on a global and national scale, such as the Bank of International Settlements’ provision of consultation on prudential treatment of cryptoassets. See Notice, 86 FR at 55079.

bitcoin wallet addresses, NYSE Arca provides no analysis or evidence of liquidity in the bitcoin spot market or its assertion that there is “minimal impact of market orders” on the price of bitcoin. Likewise, NYSE Arca provides no analysis or evidence to demonstrate how liquidity or minimal impact of market orders serves to detect and deter potential fraud and manipulation.⁷¹ As stated above, “unquestioning reliance” on an SRO’s representations in a proposed rule change is not sufficient to justify Commission approval of a proposed rule change.⁷²

While the Sponsor and NYSE Arca provide figures describing the size of the bitcoin spot market,⁷³ such information is not sufficient to support the finding that other means besides surveillance-sharing agreements exist to prevent fraud or manipulation. NYSE Arca does not provide meaningful analysis, based on data points provided, that the concerns previously articulated by the Commission relating to fraud and manipulation of the bitcoin market have been mitigated. For example, NYSE Arca does not sufficiently refute the presence of possible sources of fraud and manipulation in the bitcoin spot market generally that the Commission has raised in previous orders. Such possible sources have included (1) “wash” trading,⁷⁴ (2) persons with a dominant position in bitcoin manipulating bitcoin pricing,⁷⁵ (3) hacking of the bitcoin network and trading platforms, (4) malicious control of the bitcoin network, (5) trading based on material, non-public information, including the dissemination of false and misleading information, (6) manipulative activity involving purported “stablecoins,” including Tether

⁷¹ See supra note 58 and accompanying text. The Exchange does not directly tie the asserted liquidity or development of the bitcoin market to an argument that such market evolution provides sufficient means to justify dispensing with the requisite surveillance sharing agreement. In addition, the Exchange makes no assertions that bitcoin is resistant to price manipulation.

⁷² See supra note 55. The Commission has previously considered and rejected similar arguments about the liquidity and growth of the bitcoin spot market and general statements about the maturation of the bitcoin market. See, e.g., Valkyrie Order, 86 FR at 74159.

⁷³ See supra note 59 and accompanying text.

⁷⁴ See infra note 107 and accompanying text.

⁷⁵ See infra note 78 and accompanying text.

(USDT), and (7) fraud and manipulation at bitcoin trading platforms.⁷⁶ Additionally, although NYSE Arca represents that “there are more than 38 million unique bitcoin wallet addresses holding a positive balance, which shows a steady increase in the number of bitcoin owners and depth of ownership over the last four years,”⁷⁷ such figure, on its own, regarding the number of wallet addresses holding bitcoin do not provide any information on the concentration of bitcoin within or among such wallets, or take into account that a market participant with a dominant ownership position could use dominant market share to engage in manipulation.⁷⁸

Further, although the Exchange describes the bitcoin marketplace as maturing with increased institutional participation and acceptance,⁷⁹ the Exchange does not elaborate on how such participation and acceptance would mitigate against fraud and manipulation.

In support of its proposal, NYSE Arca also states that the “CFTC has exercised its regulatory jurisdiction in bringing a number of enforcement actions related to bitcoin and against trading platforms that offer cryptoasset trading.”⁸⁰ The Commission has long recognized that the CFTC maintains some jurisdiction over the bitcoin spot market. However, under the Commodity Exchange Act, the CFTC does not have regulatory authority over bitcoin spot trading

⁷⁶ See USBT Order, 85 FR at 12600-01 & nn.66-67 (discussing J. Griffin & A. Shams, Is Bitcoin Really Untethered? (October 28, 2019), available at <https://ssrn.com/abstract=3195066> and published in 75 J. Finance 1913 (2020)); Winklevoss Order, 83 FR at 37585-86.

⁷⁷ See supra note 60 and accompanying text.

⁷⁸ See, e.g., Winklevoss Order, 83 FR at 37584; USBT Order, 85 FR at 12600-01; WisdomTree Order, 86 FR at 69325; Valkyrie Order, 86 FR at 74160; Kryptoin Order, 86 FR at 74170; Skybridge Order, 87 FR at 3783-84; Wise Origin Order, 87 FR at 5531; ARK 21Shares Order, 87 FR at 20019. See also Registration Statement at 21 (disclosing that: (a) some entities hold large amounts of bitcoin relative to other market participants, (b) as of the date of the [Registration Statement], the “largest [100] bitcoin wallets held a substantial amount of the outstanding supply of bitcoin and it is possible that some of these wallets are controlled by the same person or entity,” and (c) “it is possible that other persons or entities control multiple wallets that collectively hold a significant number of bitcoin, even if each wallet individually only holds a small amount,” and “[a]s a result of this concentration of ownership, large sales by such holders could have an adverse effect on the market price of bitcoin”).

⁷⁹ See supra notes 62-64 and accompanying text.

⁸⁰ See Notice, 86 FR at 55079.

platforms.⁸¹ Except in certain limited circumstances, bitcoin spot trading platforms are not required to register with the CFTC, and the CFTC does not set standards for, approve the rules of, examine, or otherwise regulate bitcoin spot markets.⁸² As the CFTC itself stated, while the CFTC “has an important role to play,” U.S. law “does not provide for direct, comprehensive Federal oversight of underlying Bitcoin or virtual currency spot markets.”⁸³ In addition, while certain bitcoin derivatives exchanges that trade bitcoin futures and options on bitcoin futures are regulated by the CFTC, the CFTC’s regulations do not extend to the bitcoin spot platforms, including the bitcoin spot platforms comprising the Index.

Moreover, even if, as the Exchange maintains, the CFTC “has historically asserted jurisdiction over spot market commodities trading, where manipulative trading in the spot market can affect its derivatives market”⁸⁴ (emphasis added), the Exchange fails to explain why the CFTC’s ability to bring enforcement action is a sufficient basis for the Exchange to dispense with the requirement to enter into a surveillance-sharing agreement with a regulated market of significant size. Specifically, where here the Shares of the proposed ETP would trade on a securities market, the Exchange fails to explain why it is relevant to the proposal that the CFTC can bring enforcement actions when spot trading affects the derivatives market. Moreover, the Commission also has the ability to bring enforcement actions for a wide array of causes, including fraud and manipulation, in the securities market. Despite this, as stated above, surveillance-sharing agreements have been consistently present whenever the Commission has approved the listing and trading of derivative securities, even where the underlying securities

⁸¹ See USBT Order, 85 FR at 12604; WisdomTree Order, 86 FR at 69328; Valkyrie Order, 86 FR at 74162; SkyBridge Order, 87 FR at 3877; ARK 21Shares Order, 87 FR at 20023.

⁸² See id.

⁸³ See Winklevoss Order, 83 FR at 37599 n.288 (quoting CFTC Backgrounder on Oversight of and Approach to Virtual Currency Futures Markets (Jan. 4, 2018), at 1, available at https://www.cftc.gov/sites/default/files/idc/groups/public/@newsroom/documents/file/backgrounder_virtualcurrency01.pdf).

⁸⁴ See supra note 66 and accompanying text.

were also listed on national securities exchanges—such as options based on an index of stocks traded on a national securities exchange—and were thus subject to the Commission’s direct regulatory authority.⁸⁵

Further, while the Exchange describes how other U.S. regulatory bodies have clarified or considered rulemaking initiatives to enhance transparency, custody, and account services relating to cryptoassets and other digital assets,⁸⁶ NYSE Arca fails to explain how such initiatives serve as a suitable substitute or regulatory supplement to dispense with the need for the Exchange to enter into a surveillance-sharing agreement with a regulated market of significant size. As discussed above, it is essential for an exchange listing a derivative securities product to enter into a surveillance-sharing agreement with markets trading the underlying assets for the listing exchange to have the ability to obtain information necessary to detect, investigate, and deter fraud and market manipulation, as well as violations of exchange rules and applicable federal securities laws and rules.⁸⁷ Such agreement provides for the sharing of information about market trading activity, clearing activity, and customer identity; that the parties to the agreement have reasonable ability to obtain access to and produce requested information; and that no existing rules, laws, or practices would impede one party to the agreement from obtaining this information from, or producing it to, the other party.⁸⁸ NYSE Arca fails to explain how the

⁸⁵ See supra note 19 and accompanying text.

⁸⁶ According to the Exchange, the OCC clarified that “federally-chartered banks are able to provide custody services for cryptoassets and other digital assets”; the Federal Reserve proposed guidelines to evaluate the requests for account services; and FinCEN has proposed rulemaking initiatives to “require certain cryptoasset transactions to be subject to [AML] compliance”; FATF has issued updated draft guidance that “would significantly broaden the reach of certain anti-money laundering, including [KYC], compliance requirements applicable to transactions in virtual assets or involving virtual asset service providers”; and the Treasury’s Office of Foreign Assets Control (“OFAC”) has “brought enforcement actions over apparent violations of the sanctions laws in connection with the provision of wallet management services for digital assets.” See supra notes 67-70 and accompanying text.

⁸⁷ See NDSP Adopting Release, 63 FR at 70959.

⁸⁸ See supra note 15 and accompanying text.

additional regulatory clarifications or rulemaking initiatives serve the function of a surveillance-sharing agreement in preventing, and sharing information about, fraud and manipulation.⁸⁹

In addition, NYSE Arca does not address risk factors specific to the bitcoin blockchain and bitcoin platforms, described in the Trust’s Registration Statement, that undermine the argument that the concerns previously articulated by the Commission relating to fraud and manipulation of the bitcoin market have been mitigated.⁹⁰ For example, the Registration Statement acknowledges that the “spot markets through which bitcoin and other digital assets trade are new and largely unregulated, and therefore, may be more exposed to fraud and security breaches than established, regulated exchanges for other financial assets or instruments”; that there is a risk of “manipulation of bitcoin spot markets by customers and/or the closure or temporary shutdown of such exchanges due to fraud”; that “many spot markets and OTC market venues, do not provide the public with significant information regarding their ownership structure, management teams, corporate practices or oversight of customer trading”; that “[o]ver the past several years, a number of bitcoin spot markets have been closed or faced issues due to fraud”; that “[t]he nature of the assets held at bitcoin spot markets makes them appealing targets for hackers and a number of bitcoin spot markets have been victims of cybercrimes”; that the bitcoin blockchain could be vulnerable to a “51% attack,” in which a bad actor (or actors) or

⁸⁹ NYSE Arca provides no data, information, or analysis as to how clarifications by the OCC regarding custody or by the Federal Reserve regarding account services address the Commission’s concerns about fraud and manipulation. Likewise, initiatives by FinCEN, FATF, and OFAC related to AML, KYC, and sanctions do not serve as a substitute for, and are not otherwise the dispositive factor in the analysis regarding, the importance of having a surveillance-sharing agreement with a regulated market of significant size relating to bitcoin. For example, AML and KYC policies and procedures do not substitute for the sharing of information about market trading activity or clearing activity, and do not substitute for regulation of national securities exchanges. See USBT Order, 85 FR at 12603 n.101 and accompanying text. See also Kryptoin Order, 86 FR at 74172 n.79 (discussing how a commenter asserts that global bitcoin and cryptocurrency markets are subject to increasing levels of regulation, oversight, and enforcement actions by global governments and regulatory bodies, but provides no data, information, or analysis as to how, among other things, any such regulation makes the listing and trading of the ETP shares inherently resistant to fraud and manipulation).

⁹⁰ See, e.g., SkyBridge Order, 87 FR at 3873; ARK 21Shares Order, 87 FR at 20019-20.

botnet that controls a majority of the processing power of the bitcoin network may be able to alter the bitcoin blockchain on which the bitcoin network and bitcoin transactions rely; and that “digital asset networks have been subject to malicious activity achieved through control of over 50% of the processing power on the network.”⁹¹

(b) Assertions Regarding the Index

The Exchange states that the “use of the Index eliminates those bitcoin spot markets with indicia of suspicious, fake, or non-economic volume from the NAV calculation methodology pursuant to which the Trust prices its Shares.”⁹² In addition, the Exchange asserts that the use of multiple eligible bitcoin spot markets is designed to mitigate the potential for idiosyncratic market risk.⁹³ NYSE Arca also contends that the use of 20 rolling three-minute increments in the construction of the Index means that a malicious actor would need sustained efforts to “manipulate the market over an extended period of time, or would need to replicate efforts multiple times, potentially triggering review from the spot market or regulators, or both.”⁹⁴ The Exchange also states that “[a]ny attempt to manipulate the NAV would require a substantial amount of capital distributed across a majority of the eligible spot markets, and potentially coordinated activity across those markets, making it more difficult to conduct, profit from, or avoid the detection of market manipulation.”⁹⁵

Based on assertions made and the information provided, the Commission can find no basis to conclude that NYSE Arca has articulated other means to prevent fraud and manipulation that are sufficient to justify dispensing with the requisite surveillance-sharing agreement. The

⁹¹ See Registration Statement at 4, 10-11, 15.

⁹² See Notice, 86 FR at 55080.

⁹³ Id.

⁹⁴ Id.

⁹⁵ Id. See also Sponsor Letter at 2 (further asserting that novel indices, such as the Index, “provide not only a robust price for the spot bitcoin market but also negate the risk of market manipulation,” and that to manipulate the Index would require sustained intervention across multiple exchanges during a period of peak market liquidity).

record does not demonstrate that the proposed methodology for calculating the Index would make the proposed ETP resistant to fraud or manipulation such that a surveillance-sharing agreement with a regulated market of significant size is unnecessary. Specifically, NYSE Arca has not assessed the possible influence that spot platforms not included among the Index’s underlying bitcoin platforms would have on the Index.⁹⁶ The record does not establish that the broader bitcoin market is inherently and uniquely resistant to fraud and manipulation. Accordingly, to the extent that trading on platforms not directly used to calculate the Index affects prices on the Index’s underlying bitcoin platforms, the characteristics of those other platforms—where various kinds of fraud and manipulation from a variety of sources may be present and persist—may affect whether the Index is resistant to manipulation.

Moreover, NYSE Arca’s assertions that the Index’s methodology helps make the Index resistant to manipulation are contradicted by the Registration Statement’s own statements. Specifically, the Registration Statement states, among other things, that “a number of bitcoin spot markets have been closed or faced issues due to fraud” and that “[t]he nature of the assets held at bitcoin spot markets makes them appealing targets for hackers and a number of bitcoin spot markets have been victims of cybercrimes.”⁹⁷ The Index’s constituent bitcoin platforms are a subset of the bitcoin trading venues currently in existence.

With respect to the Index specifically, the Registration Statement also states that “[p]ricing sources used by the Index are digital asset spot markets that facilitate the buying and selling of bitcoin and other digital assets”; “[a]lthough many pricing sources refer to themselves as “exchanges,” they are not registered with, or supervised by, the [Commission] or CFTC and do not meet the regulatory standards of a national securities exchange or designated contract

⁹⁶ While NYSE Arca asserts that the Index’s use of a median price limits the ability of outlier prices to affect the Index, the Commission has no basis on which to conclude that the Index’s constituent bitcoin platforms are insulated from prices of others that engage in or permit fraud or manipulation. See supra notes 37-38 and accompanying text.

⁹⁷ See Registration Statement at 10, 25.

market.”⁹⁸ The Sponsor further states in the Registration Statement that “[t]he Index is based on various inputs which include price data from various third-party bitcoin spot markets” and “[t]he [MVIS] does not guarantee the validity of any of these inputs, which may be subject to technological error, manipulative activity, or fraudulent reporting from their initial source.”⁹⁹ And, although the Sponsor raises concerns regarding fraud and security of bitcoin platforms, as well as concerns specific to the Index’s constituent bitcoin platforms, the Exchange does not explain how or why such concerns are consistent with its assertion that the Index is resistant to fraud and manipulation. Indeed, the Trust’s Registration Statement undermines NYSE Arca’s arguments and assertions about how the Index is resistant fraud and manipulation.

Moreover, although the Exchange states that the Index’s “oversight [is] managed by an independent committee”¹⁰⁰ and that the Committee selects the Index’s constituent platforms from multiple eligible markets (and thus mitigate the potential for idiosyncratic market risk), the record does not provide any other details about the oversight of the Committee and how its selection processes mitigate fraud and manipulation of the constituent bitcoin platforms. Given the lack of information, the record does not suggest that the oversight or the selection process represents a unique measure to resist or prevent manipulation beyond mechanisms that exist in securities or commodities markets.¹⁰¹ Rather, the oversight performed by the Committee appears to be for the purpose of ensuring the accuracy and integrity of the Index.¹⁰² Such oversight serves a fundamentally different purpose as compared to the regulation of national securities exchanges and the requirements of the Exchange Act. While the Commission recognizes that this may be an

⁹⁸ See id. at 29.

⁹⁹ See id.

¹⁰⁰ See Notice, 86 FR at 55080.

¹⁰¹ Further, the Commission has previously considered and rejected arguments about the valuation of bitcoin according to a benchmark or reference price mitigating concerns about fraud and manipulation. See, e.g., SolidX Order, 82 FR at 16258; Winklevoss Order, 83 FR at 37587-90; USBT Order, 85 FR at 12599-601.

¹⁰² See supra notes 33 & 37 and accompanying text.

important function in ensuring the integrity of the Index, such requirements do not imbue either the Committee or the Index's underlying bitcoin platforms with regulatory authority similar to that the Exchange Act confers upon self-regulatory organizations such as national securities exchanges.¹⁰³

NYSE Arca also argues that the use of 20 rolling three-minute increments means that a malicious actor would need to sustain efforts to manipulate the market over an extended period of time, or would need to replicate efforts multiple times, potentially triggering review from the spot market or regulators, or both.¹⁰⁴ However, NYSE Arca does not show or explain how the proposed use of 20 rolling three-minute increments to calculate the Index value would effectively be able to eliminate fraudulent or manipulative activity that is not transient. Fraud and manipulation in the bitcoin spot market could persist for a "significant duration."¹⁰⁵ The Exchange also does not connect the use of the partitions¹⁰⁶ to the duration of the effects of the wash and fictitious trading that may exist in the bitcoin spot market.¹⁰⁷

NYSE Arca also does not explain the significance of the Index's unsubstantiated resistance to manipulation to the overall analysis of whether the proposal to list and trade the Shares is designed to prevent fraud and manipulation. Even assuming that NYSE Arca's argument is that, if the Index is resistant to manipulation, the Trust's NAV, and thereby the Shares as well, would be resistant to manipulation, NYSE Arca has not established in the record a basis for such conclusion.¹⁰⁸ That assumption aside, the Commission notes that the Shares

¹⁰³ See 15 U.S.C. 78f(b).

¹⁰⁴ See supra notes 94-95 and accompanying text.

¹⁰⁵ See USBT Order, 85 FR at 12601 n.66; see also id. at 12607; Kryptoin Order, 86 FR at 74172.

¹⁰⁶ See supra notes 37-38 and accompanying text.

¹⁰⁷ See WisdomTree Order, 86 FR at 69327; Kryptoin Order, 86 FR at 74172.

¹⁰⁸ Putting aside NYSE Arca's various assertions about bitcoin and developments of the bitcoin market, the Index, and the Shares, NYSE Arca also does not address concerns the Commission has previously identified, including the susceptibility of bitcoin markets to potential trading on material, non-public information (such as plans of market

would trade at market-based prices in the secondary market, not at NAV, which then raises the question of the significance of the NAV calculation to the manipulation of the Shares.¹⁰⁹

Because NYSE Arca does not address or provide any analysis with respect to these issues, the Commission cannot conclude that the Index aids in the determination that the proposal to list and trade the Shares is designed to prevent fraudulent and manipulative acts and practices. The Exchange has not demonstrated that the Index methodology makes the proposed ETP resistant to manipulation. While the proposed procedures for calculating the Index using prices from the constituent bitcoin platforms may be intended to provide some degree of protection against attempts to manipulate the Index, these procedures are not sufficient for the Commission to dispense with the requisite surveillance-sharing agreement with a regulated market of significant size.

(c) Assertion Regarding the Create/Redeem Process

NYSE Arca also asserts that, because the Trust will, in ordinary circumstances, not purchase or sell bitcoin, but instead process all creations and redemptions in-kind in transactions with authorized participants, “the Trust is uniquely protected against potential attempts by bad actors to manipulate the price of bitcoin on spot markets contributing to the Index and thereby

participants to significantly increase or decrease their holdings in bitcoin; new sources of demand for bitcoin; the decision of a bitcoin-based investment vehicle on how to respond to a “fork” in the bitcoin blockchain, which would create two different, non-interchangeable types of bitcoin), or to the dissemination of false or misleading information. See Winklevoss Order, 83 FR at 37585. See also USBT Order, 85 FR at 12600-01; WisdomTree Order, 86 FR at 69329 n.114; Kryptoin Order, 86 FR at 74174 n.107; Skybridge Order, 87 FR at 3872; Wise Origin Order, 87 FR at 5533 n.89; ARK 21Shares Order, 87 FR at 20022 n.117.

¹⁰⁹ See Registration Statement at 5 (stating that the NAV of the Trust may deviate from the market price of its Shares for a number of reasons, including price volatility, trading activity, normal trading hours for the Trust, the calculation methodology of the NAV, and/or the closing of bitcoin trading platforms due to fraud, failure, security breaches or otherwise); Registration Statement at 30 (disclosing that shareholders should be aware that the public trading price per Share may be different from the NAV for a number of reasons, including price volatility, trading activity, the closing of bitcoin trading platforms due to fraud, failure, security breaches or otherwise, and the fact that supply and demand forces at work in the secondary trading market for Shares are related, but not identical, to the supply and demand forces influencing the market price of bitcoin).

the Trust's NAV calculation."¹¹⁰ According to NYSE Arca, this is true even with respect to transactions with authorized participants who rely on the cash exchange process described above because the Trust will create (or redeem, as appropriate) Baskets only upon the receipt (or distribution, as appropriate) of bitcoin, and will not create or redeem any Baskets based on the receipt or distribution of cash alone.¹¹¹ Thus, as NYSE Arca argues, "even if a bad actor were able to temporarily manipulate the price of bitcoin on a spot market or manipulate enough of the volume of the markets to overwhelm the protections designed into the Index and thereby the NAV, the fact that the Trust will create or redeem Baskets only upon receipt or distribution of bitcoin (in all circumstances barring a forced redemption) means that the amount of bitcoin per Share held by the Trust would not be impacted."¹¹²

NYSE Arca has not demonstrated that in-kind creations and redemptions provide the Shares with a unique resistance to manipulation.¹¹³ The Commission has previously addressed similar assertions.¹¹⁴ As the Commission stated before, in-kind creations and redemptions are a

¹¹⁰ See Notice, 86 FR at 55080. According to the Exchange, except to pay certain expenses or in the case of a forced redemption or other ordinary circumstances, the Trust will not purchase or sell bitcoin directly. See *id.* at 55080 n.43. See also Coinbase Letter at 2.

¹¹¹ See Notice, 86 FR at 55080.

¹¹² See *id.* The Exchange asserts that, because the Trust will generally not accept cash in order to create new Shares or, barring a forced redemption of the Trust or under other extraordinary circumstances, be forced to sell bitcoin to pay cash for redeemed Shares, "the ratio of bitcoin per Share that [a]uthorized [p]articipants will tender (for creations) or receive (for distributions) will not change as a result of any changes in the price per Share, even if the [a]uthorized [p]articipant relies on the cash exchange process to facilitate such creation or redemption." *Id.*

¹¹³ The Sponsor also asserts that the creation/redemption process is at the core of bringing the "[NAV] of the underlying holdings as close to the traded value of the product as possible" and notes that the "in-kind exchange for redemption and creation of Shares is more efficient than cash," but the Sponsor provides no other explanation as to whether in-kind creations and redemptions mitigate against the Commission's concerns regarding fraud and manipulation in the bitcoin market or justify dispensing with the requisite surveillance-sharing agreement. See Sponsor Letter at 6.

¹¹⁴ See Winklevoss Order, 83 FR at 37589-90; USBT Order, 85 FR at 12607-08; VanEck Order, 86 FR at 64546; WisdomTree Order, 86 FR at 69329; Kryptoin Order, 86 FR at 74174; SkyBridge Order, 87 FR at 3874; Wise Origin Order, 87 FR at 5533; ARK 21Shares Order, 87 FR at 20022.

common feature of ETPs, and the Commission has not previously relied on the in-kind creation and redemption mechanism as a basis for excusing exchanges that list ETPs from entering into surveillance-sharing agreements with significant, regulated markets related to the portfolio's assets.¹¹⁵ Accordingly, the Commission is not persuaded here that the Trust's in-kind creations and redemptions afford it a unique resistance to manipulation.

2. Assertions That NYSE Arca Has Entered Into a Comprehensive Surveillance-Sharing Agreement with a Regulated Market of Significant Size

As NYSE Arca has not demonstrated that other means besides surveillance-sharing agreements will be sufficient to prevent fraudulent and manipulative acts and practices, the Commission next examines whether the record supports the conclusion that NYSE Arca has entered into a comprehensive surveillance-sharing agreement with a regulated market of significant size relating to the underlying assets. In this context, the term "market of significant size" includes a market (or group of markets) as to which (i) there is a reasonable likelihood that a person attempting to manipulate the ETP would also have to trade on that market to successfully manipulate the ETP, so that a surveillance-sharing agreement would assist in detecting and deterring misconduct, and (ii) it is unlikely that trading in the ETP would be the predominant influence on prices in that market.¹¹⁶

In its proposal, however, NYSE Arca does not identify any market as a "market of significant size" and accordingly makes no assertions regarding, and provides no information to establish, either prong of the "market of significant size" determination.¹¹⁷ The requirements of Section 6(b)(5) of the Exchange Act apply to the rules of national securities exchanges.

¹¹⁵ See, e.g., iShares COMEX Gold Trust, Securities Exchange Act Release No. 51058 (Jan. 19, 2005), 70 FR 3749, 3751-55 (Jan. 26, 2005) (SR-Amex-2004-38); iShares Silver Trust, Securities Exchange Act Release No. 53521 (Mar. 20, 2006), 71 FR 14969, 14974 (Mar. 24, 2006) (SR-Amex-2005-072).

¹¹⁶ See Winklevoss Order, 83 FR at 37594. This definition is illustrative and not exclusive. There could be other types of "significant markets" and "markets of significant size," but this definition is an example that provides guidance to market participants. See id.

¹¹⁷ See Valkyrie Order, 86 FR at 74163.

Accordingly, the relevant obligation for a comprehensive surveillance-sharing agreement with a regulated market of significant size, or other means to prevent fraudulent and manipulative acts and practices that are sufficient to justify dispensing with the requisite surveillance-sharing agreement, resides with the listing exchange. Because there is insufficient evidence in the record demonstrating that NYSE Arca has satisfied this obligation, the Commission cannot approve the proposed ETP for listing and trading on NYSE Arca.

Pursuant to Section 19(b)(2) of the Exchange Act, the Commission must disapprove a proposed rule change filed by a national securities exchange if it does not find that the proposed rule change is consistent with the applicable requirements of the Exchange Act—including the requirement under Section 6(b)(5) that the rules of a national securities exchange be designed to prevent fraudulent and manipulative acts and practices.¹¹⁸

For the reasons discussed above, NYSE Arca has not met its burden of demonstrating that the proposal is consistent with Exchange Act Section 6(b)(5),¹¹⁹ and, accordingly, the Commission must disapprove the proposal.¹²⁰

C. Other Comments

One commenter argues that the approval of a futures-based ETP should allow for the Commission to approve NYSE Arca's proposal because a futures-based ETP and the Trust are

¹¹⁸ See 15 U.S.C. 78s(b)(2)(C).

¹¹⁹ 15 U.S.C. 78f(b)(5).

¹²⁰ In disapproving the proposed rule change, the Commission has considered its impact on efficiency, competition, and capital formation. See 15 U.S.C. 78c(f). The Sponsor argues that the growth of digitalized U.S. dollars demonstrates that the technological advancements in bitcoin are symbiotic with fiat currencies, reinforcing the operational efficiencies to be gained from final and virtually instantaneous settlement. See Sponsor Letter at 4. The Sponsor also asserts that, just as an in-kind exchange for redemption and creation of Shares is more efficient than cash, establishing this precedent may also lead to the natural extension of investors seeking in-kind delivery as they consume custodial and other financial services directly, and that, in this case, "exchange traded products would be a transition to a more digitalized, personalized, and efficient form of automated financial services." See Sponsor Letter at 6. For the reasons discussed throughout, however, see *supra* note 51, the Commission is disapproving the proposed rule change because it does not find that the proposed rule change is consistent with the Exchange Act. See also USBT Order, 85 FR at 12615.

both reliant on bitcoin's underlying price, and ETPs that invest in bitcoin futures contracts present substantially similar risk of manipulation as the Trust.¹²¹

The Commission disagrees with the premise of the argument. The proposed rule change does not relate to the same underlying holdings as either exchange-traded funds registered under the Investment Company Act of 1940 that provide exposure to bitcoin through CME bitcoin futures or bitcoin futures ETPs. The Commission considers the proposed rule change on its own merits and under the standards applicable to it. Namely, with respect to this proposed rule change, the Commission must apply the standards as provided by Section 6(b)(5) of the Exchange Act, which it has applied in connection with its orders considering previous proposals to list bitcoin-based commodity trusts and bitcoin-based trust issued receipts.¹²²

Moreover, when the Commission recently approved proposals by NYSE Arca and Nasdaq to list and trade shares of ETPs holding bitcoin futures contracts that trade on the Chicago Mercantile Exchange, Inc. ("CME") as their only non-cash holdings, the Commission found that each listing exchange had met its obligations under Exchange Act Section 6(b)(5) by demonstrating that the exchange had a comprehensive surveillance-sharing agreement with a regulated market of significant size related to CME bitcoin futures contracts. In each such case, however, the proposed "significant" regulated market (i.e., the CME) with which the listing exchange had a surveillance-sharing agreement was the same market on which the underlying bitcoin assets (i.e., CME bitcoin futures contracts) traded; and thus in each such case, the CME's surveillance can reasonably be relied upon to capture the effects on the CME bitcoin futures market caused by a person attempting to manipulate a futures ETP by manipulating the price of CME bitcoin futures contracts, whether that attempt is made by directly trading on the CME bitcoin futures market or indirectly by trading outside of the CME bitcoin futures market.

¹²¹ See Coinbase Letter at 2.

¹²² See supra note 12. See also VanEck Order, 86 FR at 64552; Skybridge Order, 87 FR at 3881 n.177. See generally Teucrium Order & Valkyrie XBTO Order, supra note 11.

However, as the Commission stated, this reasoning does not extend to spot bitcoin ETPs. Spot bitcoin markets are not currently “regulated.” As explained in the Teucrium Order and the Valkyrie XBTO Order, if an exchange seeking to list a spot bitcoin ETP relies on the CME as the regulated market with which it has a comprehensive surveillance-sharing agreement, the assets held by the spot bitcoin ETP would not be traded on the CME; and because of this important difference, with respect to a spot bitcoin ETP, there would be reason to question whether a surveillance-sharing agreement with the CME would, in fact, assist in detecting and deterring fraudulent and manipulative misconduct affecting the price of the spot bitcoin held by that ETP. In any event, however, in the current proposal, NYSE Arca does not identify any market as a “market of significant size.”

The Commission also received comment letters that addressed the general nature of bitcoin¹²³ and the maturation of custodial practices relating to the safekeeping of bitcoin.¹²⁴ Ultimately, however, additional discussion of these topics is unnecessary, as they do not bear on the basis for the Commission’s decision to disapprove the proposal.

IV. CONCLUSION

For the reasons set forth above, the Commission does not find, pursuant to Section 19(b)(2) of the Exchange Act, that the proposed rule change is consistent with the requirements of the Exchange Act and the rules and regulations thereunder applicable to a national securities exchange, and in particular, with Section 6(b)(5) of the Exchange Act.¹²⁵

IT IS THEREFORE ORDERED, pursuant to Section 19(b)(2) of the Exchange Act, that proposed rule change SR-NYSEArca-2021-67 be, and hereby is, disapproved.

¹²³ See Letter from Sam Ahn (Oct. 7, 2021).

¹²⁴ See Coinbase Letter at 4.

¹²⁵ As the Commission, for the reasons stated above, does not find the proposed rule change is consistent with the requirements of the Exchange Act and the rules and regulations thereunder, the Commission does not address here the Exchange’s proposal as it pertains the Trust’s investment objective to reflect the performance of bitcoin in U.S. dollars on a carbon neutral basis through MCO2 Tokens.

By the Commission.

J. Matthew DeLesDernier,

Assistant Secretary.

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